1.1. Method and arrangement for generating binary sequences of random numbers

2.1. The object is to provide a cost-effective method and an arrangement for generating binary sequences of random numbers. The method of achieving this should be such that integration on a chip card is easily possible.

2.2. This method is based on the principle of random selection of the path of photons on a beam splitter and generating a random number by using two detectors (D1₀, D2₁) downstream from a beam splitter (ST2). To generate photons, a light source (L) of a low power is used, and an additional beam splitter (ST1) is connected upstream from the beam splitter (ST2). The photons emitted by the light source (L) during a predefined measurement time are split by the beam splitters (ST1, ST2) arranged one after the other in the beam path of the light source (L). The random sequence is generated when the splitting of the photons matches a predefined photon scheme.

2.3. This method makes available an inexpensive random generator which can be integrated into a chip card easily in particular because of the light source (L) used.

3:0. Figure 1

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